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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/940,401

08/27/2001

Francois Marquis

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08/09/2006

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EXAMINER

FAULK, DEVONA E

ART UNIT

PAPER NUMBER

2615

DATE MAILED: 08/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/940,401

Applicant(s)

MARQUIS ET AL.

Examiner

Devona E. Faulk

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 August 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, filed 5/3/2006, with respect to the rejection(s) of claim(s) 1-13 under 102 (b) and 103 (a) with regards to the prior art not disclosing a control signal that controls the frequency band or transmission power, have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Kuznicki et al.
2. Although the examiner was persuaded to set forth a new rejection, the examiner notes that the language "a control signal that selects the frequency band or the transmission power" asserted in the argument, does not equate to the claim language as recited in the claim. The claim language only recites "a control input controlling at least one of a frequency band and of a power level of said signal to be transmitted". This does not necessarily equate to the control signal selecting the frequency or the transmission power (i.e. a control signal turning the power on or off could read on the claim language as currently recited).
3. The applicant's arguments with respect to the 112 rejection of claim 8 are persuasive and therefore the rejection has been withdrawn.
4. The applicant has amended claim 9 to overcome the 112 rejection set forth in the previous action.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:


The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. **Claim 1** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites "audio signal/control signal decoder unit". The specification teaches of an audio decoder (See Figures 1 and 2) and not a decoder as recited in the claim.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1-6, <sup>8</sup>10-13** are rejected under 35 U.S.C. 103(a) as being unpatentable over McGreevy (US 5,319,716) in view of Kuznicki et al. (US 4,972,439). 

Regarding claim 1, McGreevy discloses a wireless transmitter (Figure 1) comprising:

an antenna (52, figure 1);

a transmitter signal generator unit generating a signal to be transmitted to an output and having a control input, a control signal applied to said control input (BA 1404; column 2, lines 18-36; column 2, lines 35-38 and 58-60);

said output of said generator unit being operationally connected to an antenna (Figure 1);

an audio signal /control signal decoder unit (signal from CD player (left and right form the signal; column 1, lines 52-55) (compressor circuits, 10 and 12 form decoder; one synonym of decode is to alter or change and compressor serves to alter the signal); said decoder unit generating a control signal at an output of said decoder unit in response to an encoded audio signal at an input of said decoder unit (Figure 1);

said output of said decoder unit being operationally connected to said control input of said generator unit (Figure 1).

McGreevy teaches of the transmitter having a tuner and of frequency selection (column 3, line 8-18).

McGreevy fails to explicitly disclose that the output of the decoder generates a control signal that controls at least one of a frequency band and of a power level of said signal to be transmitted.

Kuznicki discloses a wireless transmitter having a decoder whose output controls the frequency or power selection (Figure 3; column 5, lines 45-55).

It would have been obvious to modify McGreevy so that the output of the decoder controls the frequency selection as taught by Kuznicki in order to have increased transmitter control capabilities.

Regarding **claim 2**, McGreevy as modified by Kuznicki discloses said input of said decoder unit being operationally connected to at least one audio signal input tab (left and right inputs) of said wireless transmitter (McGreevy; column 1, lines 52-55).

Regarding **claim 3**, McGreevy as modified by Kuznicki further discloses said input tab being connectable to at least one external audio signal source (McGreevy; column 1, lines 52-55; column 2, lines 39-41).

Regarding **claim 4**, McGreevy as modified by Kuznicki further discloses and wherein said audio signal source is at least one of a microphone, an audio player and an Internet connection device (McGreevy, column 1, lines 52-55; column 2, lines 39-41).

Regarding **claim 5**, McGreevy as modified by Kuznicki further discloses wherein said generator unit comprises a modulator unit (McGreevy; 16 and 16') with a carrier frequency signal input (McGreevy; 36, Figure 1) and an output being operationally connected to said output of said generator unit (Figure 1) and having a modulation input, said modulation input being operationally connected to said input for said encoded audio signal (McGreevy; Figure 1).

Regarding **claim 6**, McGreevy as modified by Kuznicki further discloses wherein said generator unit generating said signal to be transmitted as an amplitude-modulated signal, a frequency –modulated signal, a phase-modulated signal or a modulated pulse signal (McGreevy; abstract).

Regarding **claim 8**, McGreevy as modified by Kuznicki discloses wherein said encoded audio signal is a dual-tone multi-frequency signal (Kuznicki, Figure 1).

Regarding **claim 9**, McGreevy as modified by Kuznicki fails to disclose wherein said audio signal to control signal decoder receives an encoded audio signal in a frequency range of 100 Hz to 20 kHz. It is well known in the art that CD players can supply music within the claimed range. It would have been obvious to modify McGreevy so that the audio signals supplied are in range of 100Hz to 20Khz in order to be able to process signals from the CD source.

Regarding **claim 10**, McGreevy as modified by Kuznicki further discloses wherein said frequency band comprises more than one carrier frequency of said signal to be transmitted (McGreevy; implicit; column 3, lines 2-7).

Regarding **claim 11**, McGreevy as modified by Kuznicki further discloses a manually operable selection unit with an output operationally connected to a control input of a carrier frequency generator unit, said control input controlling selection of the carrier frequency of said signal to be transmitted, out of said more than one carrier frequency (McGreevy; manually controllable reactive components 54, Figure 1; column 3, lines 2-7).

Regarding **claim 12**, McGreevy as modified by Kuznicki further discloses wherein said encoded audio signal defining more than one carrier frequency in said frequency band (McGreevy; implicit; column 3, lines 2-7).

Regarding **claim 13**, McGreevy as modified by Kuznicki discloses a hearing system (McGreevy; wireless compact disc stereo playback system) comprising:

An ear device (McGreevy; sound system of vehicle) with an output electrical to mechanical converter (McGreevy; vehicle speakers inherent; column 2,

lines 10-11) and with a wireless receiver (McGreevy; FM radio, antenna/receiver of automobile), the output thereof being operationally connected to said electrical to mechanical converter (McGreevy; column 2, lines 10,11;inherent);

A wireless transmitter (McGreevy; Figure 1) according to one of the claims 1 to 12 (See above apropos rejection of claim 1), a signal transmitted from said wireless transmitter being received and demodulated at said ear device and acting on said electrical to mechanical converter (McGreevy; Figure 1; column 2, lines 2-11; column 3, lines 8- 18).

9. **Claim 7** is rejected under 35 U.S.C. 103(a) as being unpatentable over McGreevy (US 5,319,716) as applied to claim 1 above and Kuznicki et al. (US 4,972,439) as applied to claim 1 above, in further view of Koike (US 6,778,814).

Regarding **claim 7**, McGreevy as modified by Kuznicki fails to disclose of a wireless transmitter further comprising at least one microphone, an output thereof being operationally connected to said input of said decoder unit. Koike teaches of wireless transmitter further comprising at least one microphone, an output thereof being operationally connected to said input of said decoder unit (Figure 2). It would have been obvious to modify McGreevy by incorporating a microphone in order to provide the capability of wirelessly transmitted voice signals.



### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devona E. Faulk whose telephone number is 571-272-7515. The examiner can normally be reached on 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848.


The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2615. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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**SINH TRAN**  
**SUPERVISORY PATENT EXAMINER**